In the Specification:

Please delete the paragraph starting on page 2, line 17 in the Specification, as follows:

~~Smith~~	~~U.S. patent~~	~~891,013~~	~~June 16, 1908~~
~~Ives,~~	~~U.S. patent~~	~~1,883,290~~	~~Oct. 8, 1932~~
~~Ives,~~	~~U.S. patent~~	~~2,012,995~~	~~Sept. 3, 1935~~
~~Staihlin et al.~~	~~U.S. patent~~	~~2,609,738~~	~~Sept. 9 1952~~
~~Strauss~~	~~U.S. patent~~	~~2,928,311~~	~~March 15, 1960~~
~~Collender,~~	~~U.S. patent~~	~~3,178,720~~	~~April 13, 1965~~
~~Glenn,~~	~~U.S. patent~~	~~3,518,929~~	~~July 7, 1970~~
~~Matsunaga,~~	~~U.S. patent~~	~~3,682,064~~	~~August 8, 1972~~
~~Collender,~~	~~U.S. patent~~	~~3,815,979~~	~~June 11, 1974~~
~~Danko, Jr. et al~~	~~U.S. patent~~	~~4,010,481~~	~~March 1, 1977~~
~~Collender,~~	~~U.S. patent~~	~~4,089,597~~	~~May 16, 1978~~
~~Collender,~~	~~U.S. patent~~	~~4,158,487~~	~~June 19, 1979~~
~~Ross,~~	~~U.S. patent~~	~~4,199,253~~	~~April 22, 1980~~
~~Morioka~~	~~U.S. patent~~	~~4,239,359~~	~~Dec. 16, 1980~~

Please add the paragraph below starting on page 2, line 31 in the Specification, as follows:

Smith	U.S. patent	891,013	June 16, 1908
Ives,	U.S. patent	1,883,290	Oct. 8, 1932
Ives,	U.S. patent	2,012,995	Sept. 3, 1935
Staihlin et al.	U.S. patent	2,609,738	Sept. 9 1952
Strauss	U.S. patent	2,928,311	March 15, 1960
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Collender,	U.S. patent	3,815,979	June 11, 1974

Danko, Jr. et al	U.S. patent	4,010,481	March 1, 1977
Collender,	U.S. patent	4,089,597	May 16, 1978
Collender,	U.S. patent	4,158,487	June 19, 1979
Ross,	U.S. patent	4,199,253	April 22, 1980
Morioka	U.S. patent	4,239,359	Dec. 16, 1980

Please amend the paragraph starting on page 3, line 4 in the Specification, as follows:

Another object of my invention is to use ~~novel shapes and dispositions of cam-era arrays~~ novel shapes and dispositions of camera arrays in combination with new methods of assembling and presenting these records to produce other novel effects. Camera array shapes, such as, but not limited to long chains of cameras, in linear, or curvilinear ~~array~~ arrays are employed. These arrays can be operated in synchrony or non-synchrony to capture different angular visual records of a subject area. These different records can be sequentially displayed to create the novel visual effect of traveling linearly, or curvilinearly along the chain, through a frozen moment of time. The effects will be similar to the tableaux effects in theatrical plays. Animate objects like people are frozen in time, yet one character gets to move through this moment.

Please amend the paragraph starting on page 3, line 15 in the Specification, as follows:

A more generalized object of my invention is to provide powerful, new visual and/or aural perceptions of the world, employing methods in which ~~arrays of various receiver devices~~ arrays of various receiver devices, such as, but not limited to, camera devices, or microphones, or combinations thereof, capture different angular records of energy emanating from a subject of interest. Which arrays are of many and variable shape, e.g. circular, arcurate, linear, curvilinear, dome-like, or many other shapes. Which arrays are comprised of members that can be individually manipulated, positioned, aimed, and operated, before and during energy capture, by hand, or by remote control, or remote computer control, in synchrony or non-synchrony. Recordings made by the many array members are ~~captured, manipulated, and combined~~ captured, manipulated, and combined into many and variable sequences, and ~~presented~~ presented according to methods described below to provide said novel visual and/or aural perceptions.

Please amend the paragraph starting on page 3, line 30 in the Specification, as follows:

Fig. 1A shows 10 video camera devices, arrayed in a horizontally circular array around a diving area. In practice, from 6 to hundreds of cameras would be employed in this array. Long focal length lenses would enable distant camera placement, allowing a large number of array members. 150 computer; 152 video storage (tape, disc,or other); 153 alternative on-camera storage (as in High Eight); 156 pan/tilt servos; 158 and 160 are eletrical or fiber optic communication paths between components, operator, and audience. ~~Fig. 1 B shows frames of a diver, ready to be rotated.~~

Please add the paragraph below starting on page 4, line 3 in the Specification, as follows:

Fig. 1B shows frames of a diver, ready to be rotated.

Please add the paragraph below starting on page 4, line 3 in the Specification, as follows:

Fig. 1C shows alternative frames of a diver, ready to be rotated.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 8 shows an alternative embodiment of two views of a curvilinear array of camera devices according to the present invention.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 9 shows an array of beam splitters as an alternative embodiment of the present invention and relating to the embodiment seen in Figure 4.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 10 shows an arrangement method to squeeze a greater amount of frames of visual data onto a length of color film.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 11 shows two views of a curvilinear array of camera devices according to the present invention set up to record butterflies.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 12 illustrates the use of glass sheets in association with the camera array of the present invention.

Please add the paragraph below starting on page 4, line 33 in the Specification, as follows:

Fig. 13 is an alternatve view of the beam splitter shown in Figure 4.

Please amend the paragraph starting on page 5, line 8 in the Specification, as follows:

For one example, in order to analyze light energy reflecting from the surfaces of an Olympic diver, we arrange a plurality ~~or~~ of motion video cameras into a horizontal ring around the diver, with all cameras aimed and focused upon the same point, and all adjusted to take in the entire dive area. In ~~figure 1~~ Figure 1A, we see the diver surrounded by the camera ring. Here, 10 of a multitude of cameras are shown. In practice we would use from 8 cameras, to hundreds of cameras. In this example, the cameras are fixedly mounted at 15 degrees to the horizontal to

avoid including other cameras in the scene. Cameras are gen-locked to synchronize image capture on either internal tape (such as "High Eight" 8mm) or external multi-track video recorder. Infra-red focus maintains sharp focus of moving diver. Lighting and aperture are selected to provide good subject focus while giving little background detail. In this instance, we operate our cameras in synchrony, capturing frame after frame of visual data as he dives through the air and into the water. We choose a moment in time, say that moment when the diver just begins to slice the water. We choose the frame recorded most closely in time to that instant, say frame number 248, and have a video control computer select frame 248 from each camera by frame-grab control and plant each in sequence on an "output" tape. Displayed traditionally, at 30 video frames per second onto a video screen, this output tape produces a rotational effect; like looking at a rotating statue of this diver, frozen at this instant of time, with even the water droplets frozen in mid-air. This display would blend and enhance the more usual action tapes of the event. The effect appears on a traditional television screen, and the viewer can sit and watch while this amazing, beautiful and useful effect is displayed. The viewer does not have to get up out of a chair and walk about a display mechanism to enjoy this effect.

Please amend the paragraph starting on page 6, line 33 in the Specification, as follows:

Or, we could form a curvilinear array and operate it to form a tracking effect. For example, we would arrange our cameras and employ our methods to simulate a walk through a room filled with frozen butterflies. Refer to ~~figures 2A and 2B~~ Figures 2 and 8 to find still cameras curvilinearly arrayed down a path through this room, with array members pointing first left (cameras 20 - 103; cameras 1- n), then rising smoothly through series E while shifting gaze to the right (cameras 104 - 112), then continuing through the room pointed rightward (cameras 113 - n). The angles of view of adjacent cameras (A,B) and (C,D) slightly overlap. This is a technique familiar to animators. If the subject image were to leap too far, frame to frame, the displayed result would form a strobe-like effect. Overlap from image to image provides a smooth, coherent result. The brightly lit room is full of live, fluttering butterflies. All shutters are made to release at one moment, at high shutter speed, (say 1/1 000 second) to capture a frame of visual data. We select that frame from each camera, and arrange them in sequence from camera 20 to camera n, or camera 1 to n in figure 8, on a storage medium such as, but not limited

to motion picture film, video tape, optical or magnetic storage disc, or RAM memory. We then display this sequence rapidly as is done in motion picture or television display. (Twenty-four frames per second is the theatrical motion picture standard, and 30 frames per second is the NTSC standard, but any rate which is rapid enough to form a coherent visual effect may be employed.) This rapid display forms a visual simulation of travel through this room full of living butterflies. The simulation begins as we travel into the room, gazing slightly to the left, according to our array configuration (~~fig.2,~~Fig. 2 cameras 20-103; Fig. 8, cameras 1-103). Near the middle of the room we rise as we shift gaze to the right (E, cameras 104 - 113), and proceed through the room, gazing slightly rightward (cameras 113 - n.). Cameras rise out of the preceding cameras' view from 104 to 113.

Please amend the paragraph starting on page 11, line 15 in the Specification, as follows:

A computer automated process to perform these functions would facilitate instant replay effects of an athlete during competition. For example, prior to the diving events, our geometric target would be temporarily suspended in the dive space. Each camera in our apparatus would be pre-aimed at this target, and its view recorded. A computer program would analyze the recorded image of the target provided by each camera. If one of our cameras were aimed slightly and improperly tilted to the left, then the computer would see a target shape slightly tipped to the right. The program would measure this deviation, and would create a file record of the changes necessary to rotate this camera's ~~output~~ output to vertical. We would not necessarily need to re-orient the camera itself, only the camera's output. A record is made for each camera, and these records are called a **'Record of Changes' or (ROC) file**. When we later call for an instant replay of diving action, our program will quickly be able to manipulate the image from each camera according to (ROC) instructions, and feed the corrected images into the stream, forming our rotational effect.

Please amend the paragraph starting on page 11, line 30 in the Specification, as follows:

In practice, the following series of steps would be performed to achieve a dynamically manipulable array, whose capture and display attributes would allow instant replay effects. First,

a human operator or a computer program would direct camera array, shape, member position along the array, member orientation to the subject, member orientation to adjacent array members, member aim, and focus and focal length as accurately as possible, ~~brining~~ bringing the array into proper adjustment to capture the data necessary to produce the desired display result. These adjustments would be effected using servo type mechanisms, and other mechanical or electro-mechanical devices attached to each camera member. The computer would then fine tune the array ~~positional~~ positional and ~~optical attributes~~ optical attributes by target and ROC method. Finally, ROC file data would be used to change recorded ~~image attributes~~ image attributes (prior to image storage, or at replay); which changes would alleviate remaining registration problems upon display.

Please amend the paragraph starting on page 13, line 1 in the Specification, as follows:

Or, this same capability could be acquired by calculating a multitude of ROCs in advance, for a particular array orientation. The axis of rotation associated with each ROC target would be plotted upon a map of the athletic area. One could then, instantly choose a particular ROC from the map which corresponds to the area about which we now wish to rotate. For instance, multiple targets, physical or projected, might be placed, one at a time, or as a group, along the path which a diver is likely to travel. (~~See figure 3.~~ See Figure 3A.) These targets would be imaged by the array. If one wished to rotate about the diver just as the diver comes off the board, one would choose the ROC from the target which was at that location, and computer manipulate the images from our circular array to form a rotational effect about that axis. If we wish to capture him as he enters the water, we would choose the ROC target which resided at that location. And so on.

Please amend the paragraph starting on page 14, line 27 in the Specification, as follows:

Or, one might wish to ~~combine~~ combine aural and visual information according to our methods. For example, if our subject were a bat (animal), one might choose to couple a microphone to each camera, forming a combined array. We might choose a short stream of visual information from each member of the array (1/1000 second shutter speed) to freeze, and pair each of these "frames" with ~~a1/1000~~ a 1/1000 second stream or "frame" of aural information,

then display this series according to our method. Thus, simulating a rotating statue of a bat, frozen and screeching, at that one instant.